## **CLAIMS:**

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What we claim is:-

1. A compound of formula (1):

formula (1)

Z is selected from -CONR<sup>15</sup>OH and -N(OH)CHO;

R<sup>15</sup> is hydrogen or C<sub>1-3</sub>alkyl;

R<sup>1</sup> is hydrogen or a group selected from C<sub>1-6</sub>alkyl, C<sub>2-6</sub>alkenyl, C<sub>2-6</sub>alkynyl, C<sub>3-7</sub>cycloalkyl, C<sub>5-7</sub>cycloalkyl, C<sub>1-7</sub>cycloalkyl, aryl and heteroaryl where the group is optionally substituted by one or more substituents independently selected from halo, nitro, cyano, trifluoromethyl, trifluoromethyloxy, C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkenyl, C<sub>2-4</sub>alkynyl, C<sub>3-6</sub>cycloalkyl (optionally substituted by one or more R<sup>17</sup>), aryl (optionally substituted by one or more R<sup>17</sup>), heteroaryl (optionally substituted by one or more R<sup>17</sup>), heterocyclyl, C<sub>1-4</sub>alkoxycarbonyl, -OR<sup>5</sup>, -SR<sup>2</sup>, -SOR<sup>2</sup>, -SOR<sup>2</sup>, -SO<sub>2</sub>R<sup>2</sup>, -COR<sup>2</sup>, -CO<sub>2</sub>R<sup>5</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -NR<sup>16</sup>COR<sup>5</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup> and -NR<sup>16</sup>SO<sub>2</sub>R<sup>2</sup>;

 $R^{16}$  is hydrogen or  $C_{1-3}$ alkyl;

 $R^{17}$  is selected from halo, nitro, cyano, trifluoromethyl, trifluoromethoxy,  $C_{1-6}$ alkyl,  $C_{3-6}$ cycloalkyl and  $C_{1-6}$ alkoxy;

 $R^2$  is group selected from  $C_{1\text{-}6}$ alkyl,  $C_{3\text{-}6}$ cycloalkyl,  $C_{5\text{-}7}$ cycloalkenyl, heterocycloalkyl, aryl,

20 heteroaryl, arylC<sub>1-4</sub>alkyl and heteroarylC<sub>1-4</sub>alkyl where the group is optionally substituted by one or more halo;

 $R^5$  is hydrogen or a group selected from  $C_{1\text{-}6}$ alkyl,  $C_{3\text{-}6}$ cycloalkyl,  $C_{5\text{-}7}$ cycloalkenyl, heterocycloalkyl, aryl, heteroaryl, aryl $C_{1\text{-}4}$ alkyl and heteroaryl $C_{1\text{-}4}$ alkyl where the group is optionally substituted by one or more halo;

25 R<sup>6</sup> is hydrogen, C<sub>1-6</sub>alkyl or C<sub>3-6</sub>cycloalkyl; or R<sup>5</sup> and R<sup>6</sup> together with the nitrogen to which they are attached form a heterocyclic 4- to 7membered ring; R<sup>8</sup> is hydrogen or a group selected from C<sub>1-6</sub>alkyl, C<sub>3-7</sub>cycloalkyl and C<sub>5-7</sub>cycloalkenyl where the group is optionally substituted by one or more substituents independently selected from halo, nitro, cyano, trifluoromethyl, trifluoromethyloxy and C<sub>1-4</sub>alkyl; R<sup>3</sup> and R<sup>4</sup> are both hydrogen;

5 n is 0 or 1;

m is 0 or 1;

D is hydrogen, C<sub>1-4</sub>alkyl, C<sub>3-6</sub>cycloalkyl or fluoro;

X is  $-(CR^9R^{10})_{t}-Q-(CR^{11}R^{12})_{u}$ —where t and u are independently 0 or 1 with the proviso that t and u cannot both be 0;

10 Q is O, S, SO or SO<sub>2</sub>;

R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup> and R<sup>12</sup> are independently selected from hydrogen, C<sub>1-4</sub>alkyl and C<sub>3-6</sub>cycloalkyl; B is a group selected from aryl, heteroaryl, heterocyclyl, C<sub>3-10</sub>cycloalkyl and C<sub>5-7</sub>cycloalkenyl where each group is optionally substituted by one or more groups independently selected from nitro, trifluoromethyl, trifluoromethyloxy, halo, C1-4alkyl (optionally substituted by one or

more R<sup>13</sup>), C<sub>2-4</sub>alkenyl, C<sub>2-4</sub>alkynyl, C<sub>3-6</sub>cycloalkyl (optionally substituted by one or more R<sup>13</sup>), heterocycloalkyl, heteroaryl, aryl, -OR<sup>13</sup>, cyano, -NR<sup>13</sup>R<sup>14</sup>, -CONR<sup>13</sup>R<sup>14</sup>, -NR<sup>16</sup>COR<sup>13</sup>,  $-SO_2NR^{13}R^{14}$ ,  $-NR^{16}SO_2R^{13}$ ,  $-SR^{13}$ ,  $-SOR^7$  and  $-SO_2R^7$ ;

R<sup>7</sup> is C<sub>1-6</sub>alkyl or C<sub>3-6</sub>cycloalkyl

R<sup>13</sup> and R<sup>14</sup> are independently hydrogen, C<sub>1-6</sub>alkyl or C<sub>3-6</sub>cycloalkyl;

20 or R<sup>13</sup> and R<sup>14</sup> together with the nitrogen to which they are attached form a heterocyclic 4 to 7-membered ring.

or a pharmaceutically acceptable salt or an in vivo hydrolysable ester thereof.

- A compound according to claim 1 wherein X is -(CH<sub>2</sub>)-O-, -O-(CH<sub>2</sub>)-, -(CH<sub>2</sub>)-O-2. 25 (CH<sub>2</sub>)- or -(CHMe)-O-.
- A compound according to claim 1 or 2 wherein R<sup>1</sup> is C<sub>1-4</sub>alkyl, C<sub>2-4</sub>alkynyl, C<sub>3</sub>. 3. 6cycloalkyl, aryl, heteroaryl and C1-4alkyl substituted by aryl or heteroaryl wherein any R1 group is optionally substituted by one or more substitutents independently selected from halo, 30 cyano, nitro, C<sub>1-4</sub>alkoxy, C<sub>1-4</sub>alkyl, trifluoromethyl and trifluoromethoxy.

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- 4. A compound according to any one of claims 1 to 3 wherein B is a group selected from aryl, heteroaryl, heterocyclyl, C<sub>3-10</sub>cycloalkyl and C<sub>5-7</sub>cycloalkenyl where each group is optionally substituted by one or more groups independently selected from nitro, trifluoromethyl, halo, C<sub>1-4</sub>alkyl, heteroaryl, –OR<sup>13</sup>, cyano, –NR<sup>13</sup>R<sup>14</sup>, –CONR<sup>13</sup>R<sup>14</sup> and NR<sup>16</sup>COR<sup>13</sup>.
  - 5. A compound according to claim 4 wherein B is aryl, heteroaryl or  $C_{3-6}$ cycloalkyl optionally substituted by 1, 2 or 3 groups independently selected from  $C_{1-4}$ alkyl, halo, cyano, nitro,  $C_{1-4}$ alkoxy and trifluoromethyl
- 6. A compound according claim 5 wherein B is 2,5-dimethylphenyl or 2-methylquinolin-4-yl.
  - 7. A compound according to claim 1, selected from:
- 15 (R/S)-1-[({4-[(2-methylquinolin-4-yl)methyloxy]piperidin-1-yl}sulphonyl)methyl]-4-pyrimidin-2-ylbutyl(hydroxy)formamide;
  - (R/S)-1-methyl-2-({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)ethyl(hydroxy)formamide;
  - (R/S)-1-pyrid-3-yl-2-({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-
- 20 yl}sulphonyl)ethyl(hydroxy)formamide;
  - (R/S)-1-(1*H*-imidazol-4-yl)-2-({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)ethyl(hydroxy)formamide;
  - (R/S)-2-({4-[(2,5-dimethylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyrid-3-ylethyl(hydroxy)formamide;
- 25 (R/S)-[1-({[4-(2,5-dimethylbenzyloxy)piperidin-1-yl]sulphonyl}methyl)-3-phenylpropyl]hydroxyformamide;
  - (R/S)-2-({4-[(2,5-dimethylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-[4-fluoro-2-(trifluoromethyl)phenyl]ethyl(hydroxy)formamide;
  - $(R/S)-2-(\{4-[(2,5-dimethylbenzyl)oxy]piperidin-1-yl\}sulphonyl)-1-[2-(3,5-dimethylbenzyl)oxy]piperidin-1-yl]$
- 30 (trifluoromethyl)phenyl]ethyl(hydroxy)formamide; (R/S)-2-({4-[(2,5-dimethylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-[3-(trifluoromethyl)phenyl]ethyl(hydroxy)formamide;

- (R/S)-2-({4-[(2,5-dimethylphenoxy)methyl]piperidin-1-yl}sulphonyl)-1-(4-fluorophenyl)ethyl(hydroxy)formamide;
- (R/S)-1-{[(4-{[(2,5-dimethylbenzyl)oxy]methyl}piperidin-1-yl)sulphonyl]methyl}-4-pyrimidin-2-ylbutyl(hydroxy)formamide
- 5 (R/S)-2-methyl-3-({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)propionic hydroxamic acid
  - (R/S)-2-({4-[(2,5-difluorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide
  - (R/S)-hydroxy(1-phenyl-2-{[4-(pyridin-2-ylmethoxy)piperidin-1-
- 10 yl]sulphonyl}ethyl)formamide;
  - (R/S)-hydroxy(1-phenyl-2-{[4-(pyridin-3-ylmethoxy)piperidin-1-yl]sulphonyl}ethyl)formamide;
  - (R/S)-2-({4-[(2,6-difluoro-3-methylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide;
- 15 (R/S)-2-({4-[(2-chloro-6-fluorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide;
  - (R/S)-2-({4-[(5-fluoro-2-methylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide;
  - (R/S)-2-{[4-(benzyloxy)piperidin-1-yl]sulphonyl}-1-phenylethyl(hydroxy)formamide;
- 20 (R/S)-hydroxy[2-({4-[(2-methylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl]formamide;
  - (R/S)-2-({4-[(3-chlorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide;
- 25 phenylethyl(hydroxy)formamide;
  - (R/S)-2-({4-[(2-fluorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide;
  - (R/S)-2-({4-[(2,6-difluorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide;
- 30 (R/S)-2-({4-[(3-fluorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide;

- (R/S)-hydroxy{1-phenyl-2-[(4-{[4-(trifluoromethyl)benzyl]oxy}piperidin-1-yl)sulphonyl]ethyl}formamide;
- (R/S)-2-{[4-(cyclohexylmethoxy)piperidin-1-yl]sulphonyl}-1-phenylethyl(hydroxy)formamide;
- 5 (R/S)-2-({4-[(4-bromobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide;
  - (R/S)-2-({4-[(4-fluorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy) formamide;
  - (R/S)-2-({4-[(2,5-dimethylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-
- 10 phenylethyl(hydroxy)formamide;
  - (R/S)-2-({4-[(2-fluoro-3-methylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-phenylethyl(hydroxy)formamide;
  - (R/S)-hydroxy[2-({4-[(2-methylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl]formamide;
- 15 (R/S)-hydroxy[2-({4-[(4-methylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl]formamide;
  - (R/S)-2-({4-[(2-fluorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl(hydroxy)formamide;
- 20 ylethyl(hydroxy)formamide;
  - (R/S)-2-({4-[(2,4-dichlorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl(hydroxy)formamide;
  - (R/S)-2-({4-[(2,6-dichlorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl(hydroxy)formamide;
- 25 (R/S)-hydroxy(2-{[4-(mesitylmethoxy)piperidin-1-yl]sulphonyl}-1-pyridin-3-ylethyl)formamide;
  - (R/S)-2-({4-[(3,4-dichlorobenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl(hydroxy)formamide;
- 30 ylethyl]formamide;
  - (R/S)-hydroxy[2-({4-[(3-methylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl]formamide;

- (R/S)-2-({4-[(3,4-dimethylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl(hydroxy)formamide;
- (R/S)-hydroxy[2-({4-[(4-methoxybenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl]formamide;
- 5 (R/S)-hydroxy[2-({4-[(4-isopropylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl]formamide;
  - (R/S)-2-({4-[(3-chloro-4-methylbenzyl)oxy]piperidin-1-yl}sulphonyl)-1-pyridin-3-ylethyl(hydroxy)formamide;
  - $(R/S)-N-hydroxy-N-isopropyl-2-methyl-3-(\{4-[(2-methylquinolin-4-yl)methoxy] piperidin-1-weight of the property of the proper$
- 10 yl}sulphonyl)propanamide;
  - hydroxy{(1R)-1-[({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)methyl]-4-pyrimidin-2-ylbutyl}formamide;
  - hydroxy{(1S)-1-[({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)methyl]-4-pyrimidin-2-ylbutyl}formamide;
- 15 (2R)-N-hydroxy-2-methyl-3-({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)propanamide
  - (R/S)-2-cyclopentyl-N-hydroxy-3-({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)propanamide;
  - (2S)-2-cyclopentyl-N-hydroxy-3-({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-
- 20 yl}sulphonyl)propanamide;
  - (2R)-2-cyclopentyl-N-hydroxy-3-({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)propanamide;
  - (2S)-N-hydroxy-4-methyl-2-[({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)methyl]pentanamide;
- 25 (2R)-N-hydroxy-4-methyl-2-[({4-[(2-methylquinolin-4-yl)methoxy]piperidin-1-yl}sulphonyl)methyl]pentanamide; and (R/S)-N-{1-[4-(2,6-dimethyl-pyridin-4-ylmethoxy)-piperidine-1-sulphonylmethyl]-4-pyrimidin-2-yl-butyl}-N-(hydroxy)formamide.

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- A compound according to claim 1 for use as a medicament.
- 9. The use of a compound according to claim 1 in the manufacture of a medicament in the treatment of a disease condition mediated by one or more metalloproteinase enzymes.
- 10. The use of a compound according to claim 1 in the manufacture of a medicament in the treatment of a disease condition mediated TNF $\alpha$ .
- 11. A method of treating autoimmune disease, allergic/atopic diseases, transplant
  10 rejection, graft versus host disease, cardiovascular disease, reperfusion injury and malignancy
  in a warm-blooded animal, such as man, in need of such treatment which comprises
  administering to said animal an effective amount of a compound according to claim 1.
- 12. A pharmaceutical composition comprising a compound according to claim 1; and a pharmaceutically-acceptable diluent or carrier.
  - 13. A process for preparing a compound according to claim 1 which comprises; when Z is -N(OH)CHO, the step of:
  - a) converting a hydroxylamine of formula (2) into a compound of formula (1);

(D)<sub>m</sub> O NH(OH) formylation B NN(OH)CHO

formula (2)

or where Z is -CONR 15OH the step of;

b) converting an acid of formula (14) into a compound of formula (1);

25 and thereafter if necessary:

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- i) converting a compound of formula (1) into another compound of formula (1);
- ii) removing any protecting groups;
- iii) forming a pharmaceutically acceptable salt or in vivo hydrolysable ester.

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